



# UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/314,518	05/19/1999	WAYNE D. GROVER	T-L-CASE-4	5305
75	90 07/06/2004		EXAM	INER
FLYNN THIEL BOUTELL & TANIS PC			TRAN, THIEN D	
2026 RAMBLING ROAD KALAMAZOO, MI 490081699			ART UNIT	PAPER NUMBER
	, 1.11		2665	15
		DATE MAILED: 07/06/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
(	09/314,518	GROVER ET AL.			
Office Action Summary	Examiner	Art Unit			
	Thien D Tran	2665			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	I36(a). In no event, however, may a reply be to by within the statutory minimum of thirty (30) do will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDON	imely filed  ays will be considered timely.  the mailing date of this communication.  ED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 05 A	pril 2004.				
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	·				
3) Since this application is in condition for allowa	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ☐ Claim(s) 11-30 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 11-30 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or subject to restriction.	wn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the	epted or b) objected to by the				
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority document</li> <li>2. Certified copies of the priority document</li> <li>3. Copies of the certified copies of the priority application from the International Bureau</li> <li>* See the attached detailed Office action for a list</li> </ul>	ts have been received. ts have been received in Applica rity documents have been receiv u (PCT Rule 17.2(a)).	tion No ved in this National Stage			
Attachment(s)  1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summar	v (PTO-413)			
2) District of Praftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail [	Date			
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal 6) Other:	Patent Application (PTO-152)			

Application/Control Number: 09/314,518

Art Unit: 2665

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 11-16, 20-22, 24-30 are rejected under 35 U.S.C. 102(e) as being participate by Ellinas et al (U.S Patent No 6,331,905 B1).

Regarding claims 11, 29, 30, Ellinas discloses a telecommunication network comprising:

plural interconnected routers (nodes), figures 12; and

at least one protecting router comprising a router table, the router table having an entry identifying an alternative route around an adjacent router to the protecting router in case of failure of the adjacent router, where the adjacent router is a separate one of the

Application/Control Number: 09/314,518

Art Unit: 2665

plural interconnected routers from the protecting router. See col.11 lines 5-25, col.19 lines 35-50 and figures 13-15.

Regarding claim 20, Ellinas discloses a method of protecting against router failure in a network, in which the network includes plural interconnected routers, the method comprising the step of:

storing at a protecting router an entry identifying a cycle of routers that form at least one alternative route around an adjacent router to the protected router, in which the cycle of routers includes all routers directly connected to the adjacent router and not the adjacent router. See col.10 lines 40-60.

Regarding claim 12, Ellinas discloses that a router table has an entry identifying a port associated with the alternative route. See figure 14

Regarding claims 13, 21, Ellinas discloses that the alternative route includes a cycle of routers directly connected to the adjacent router and there is associated with each router in the cycle of routers a routing table with an entry identifying the cycle of routers. See col.7 lines 35-45.

Regarding claims 14, 26, 27, Ellinas discloses the protecting router, comprising a router table, the router table having an entry identifying a cycle of routers directly connected to an adjacent router to the protecting router, the cycle of routers not including the adjacent router. See figure 11, col.17 lines 10-25.

Regarding claims 15, 28, Ellinas discloses that the router table has an entry identifying a port associated with the cycle of routers. See figure 14.

Application/Control Number: 09/314,518

Art Unit: 2665

Regarding claims 16, 25, 24, Ellinas discloses that the protecting router has a router table in which is stored, for each adjacent router to the protecting router, an entry identifying a cycle of routers directly connected to the adjacent router to the protecting router, each cycle of routers not including the respective adjacent router. See col.15 lines 30-50.

Regarding claim 22, Ellinas discloses a number of routing paths in a group cycle (path cost field). See figure 13.

### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 17-19, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellinas et al (U.S Patent No 6,331,905 B1) in the view of Olson et al (U.S Patent No. 4,679,189).

Regarding claims 17, 23, Ellinas discloses a data packet for a network of routers, where the routers form separate routers of a telecommunications network, data packet comprising: a restoration network specifies a cycle of routers in which the routers in the cycle are all adjacent a router not in the cycle and a data message (data field), and the router not in the cycle is a separate router of the telecommunications network from the routers in the cycle. See col.11 lines 60-65 and col.18 lines 30-50.

Ellinas does not disclose that the data message or packet comprising an ID field specifies a cycle of routers. However, Olson discloses that the packet comprising field identifying alternate route when there is a failure in a connection of a primary route, figure 6, col.11 lines 25-35. Therefore, it would have been obvious to one having ordinary skill in the art to change the field indicating the alternate route of Olson to become an indication of rerouted cycle of Ellinas so that the congestion or loss of data due to the failure in the network can be alleviated.

Regarding claims 18, 19, Ellinas discloses a number of routing paths in a group cycle (path cost field). See figure 13.

### Response to Arguments

5. Applicant's arguments filed 04/05/2004 have been fully considered but they are not persuasive.

Applicant argues that Ellinas does not teach the protected node used for as an adjacent node for rerouting when the node failed. However, Examiner respectfully disagrees with the argument because Ellinas a rerouted cycle of adjacent nodes not only in the case of the central switch fails but also in the case of a complete failure of the node with all degree, thereby the adjacent neighboring nodes used for rerouting data, col.19 lines 35-50.

# Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thien Tran whose telephone number is (703) 308-4388. The examiner can normally be reached on Monday-Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (703) 308-6602. Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Thien Tran

STÉVEN NGUYEN PRIMARY EXAMINER

Page 6